

**WHAT IS CLAIMED IS:**

1. A roller mechanism for separating paper comprising :  
a fusing roller formed with at least two annular grooves on a periphery thereof;

5       at least two paper-separating rings respectively mounted in the annular grooves correspondingly; and

a following roller contiguous to the fusing roller.

2. The roller mechanism for separating paper as in claim 1, wherein the annular grooves are formed parallel to each other and along diameter paths of  
10 the fusing roller.

3. The roller mechanism for separating paper as in claim 1, wherein a surface of the paper-separating ring is coplanar with a surface of the fusing roller.

4. The roller mechanism for separating paper as in claim 3, wherein a  
15 diameter of the paper-separating ring is larger than that of the fusing roller.

5. The roller mechanism for separating paper as in claim 3, wherein a cross-section of the annular groove along a diameter thereof is a rectangular groove, and a cross-section of the paper-separating ring along a diameter thereof is mating with the rectangular groove.

20       6. The roller mechanism for separating paper as in claim 3, wherein a cross-section of the annular groove along a diameter thereof is a curve groove, and a cross-section of the paper-separating ring along a diameter thereof is mating with the curve groove.

7. The roller mechanism for separating paper as in claim 1, wherein the  
25 paper-separating rings are made of heat-conductible material.

8. A business machine with paper-separating mechanism, the business machine comprising:

a paper outlet;

5 a paper-separating mechanism assembled therein and adjacent the paper outlet, having:

a fusing roller formed with at least two annular grooves on a periphery thereof;

at least two paper-separating rings respectively mounted in the annular grooves correspondingly; and

10 a following roller contiguous to the fusing roller.

9. The business machine with paper-separating mechanism as in claim 8, wherein the annular grooves are parallel and formed along a diameter path of the fusing roller, and a diameter of the paper-separating ring is larger than that of the fusing roller.

15 10. The business machine with paper-separating mechanism as in claim 8, wherein a cross-section of the annular groove along a diameter thereof is mating with that of the fusing roller, and a surface of the paper-separating ring is level with a surface of the fusing roller.

11. The business machine with paper-separating mechanism as in claim 8,  
20 wherein the following roller is assembled above the fusing roller.